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ABSTRACT

The Concept Attainment Model is a teaching strategy based on analysis of the nature of concepts and how they are acquired. Using this theory, three strategies for second language instruction have been developed: the reception, selection, and unorganized materials strategies. In the reception strategy, the most structured, students must be guided carefully in early classes. After choosing a grammar rule to be studied, the teacher creates sentences illustrating it (positive exemplars) and sentences in which it does not apply (negative exemplars). Students analyze the positive exemplars for common attributes, contrasting them with absence of those attributes in negative exemplars. Then students must identify unlabeled sentences as positive or negative exemplars. The selection strategy begins with unlabeled exemplars, and students must group them and develop hypotheses about their attributes. Most successful with advanced students dealing with literature or social studies immersion, the unorganized materials strategy requires students to identify attributes, not always explicit, of concepts asserted verbally in text. All three strategies use analytical and evaluative thinking skills during the concept attainment lesson, focusing on teacher objectives, general content, and the process being used. The method is exciting for students, forcing them to think and participate. Specific examples are provided of how the three strategies can be used in classrooms. (MSE)

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Learning Via the Socratic Method:

The Use of the Concept Attainment Model in Foreign Language Classes

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Teaching grammar is an important but arduous task in a foreign language class. Students enjoy listening, speaking and reading but often write carelessly, find linguistic explanations obscure and do not usually draw much lasting understanding from oral or written drills. This is one example of the difficulty that students have in grasping abstract concepts which are not part of their daily experience. The strategies presented here lead students to discover concepts through discussions of examples which embody them. They follow the Socratic method and "help children develop powers of understanding, thinking and communicating." (Kay and Young, p. 158). Maintaining students' self-confidence and motivation is essential. These strategies prevent the discouragement spoken of by Galloway (1981, p. 27) who warns: "Selling students on the idea of communication and then offering crash courses in verb forms, does little more than confuse and alienate all but the most grammar hungry students." They use and further develop the students' knowledge of the language by fostering discussion in *the foreign language*. They are applicable to classes with students who have a wide range of proficiency and avoid the subdivision of classes according to competency. The concentrated work compensates for the small number of contact hours generally available. Although the majority of examples presented deal with the attainment of concepts in grammar, there are also some exciting applications of these strategies to literature and social studies in immersion classes, which will be discussed only briefly.

The Concept Attainment Model

The Concept Attainment Model is a teaching strategy developed by Joyce and Weil in their book *Models of Teaching*. It is based on Bruner, Goodnow and Austin's *Study of Thinking*, in which they analyze the nature of concepts and how they are acquired. "For Bruner and his colleagues, a concept has three essential elements: instances, which are positive and negative examples of the concept; attributes, which are the characteristics which define the concept; and attribute values." (Hamilton and Tucker, 1984, p. 10). Joyce and Weil give, as an example, the concept "apple," which has attributes such as color, shape, taste and size. In the case of color, the attribute values can be yellow, green, or red. They do not include black or purple.

The question asked by Bruner: "How do people achieve the information necessary for isolating and learning a concept?" (Bruner, *et al*, 1977) is closely related to the question asked by foreign language teachers: What information must a student isolate in order to learn a grammar rule? Joyce and Weil (1980, p. 27) use Bruner's definition of a concept and develop three different strategies of concept attainment: The reception, selection and "un-organized materials" strategies. The first of these is particularly applicable to the study of grammar. The selection strategy, although applicable to the learning of grammar, is most suited to concepts in literature or social studies. The last strategy lends itself to more diffuse concepts of an ethical and moral nature.

The Reception Strategy

This strategy is the most structured. The students will need to be guided during the first few classes, as it is very important that they understand precisely how it works. After choosing a grammar rule to be studied, the teacher creates sentences which illustrate it (positive exemplars) and sentences to which it does not apply (negative exemplars) and writes them on the board *labeling* the examples as positive and negative. This strategy is excellent for teaching grammar since the attributes of the concept to be learned are usually very limited, quite precise, and non-negotiable.

During the first part of the class, the students analyze the positive exemplars and deduce what attributes they have in common, contrasting them with the absence of these attributes in the negative exemplars. They then develop hypotheses concerning the concept they have to discover. If these hypotheses are wrong, they are asked to reexamine the attributes of

the positive exemplars. Depending on the receptivity of a particular group of students, the teacher might help in this phase by manipulating the flow of data through the particular sequencing of the examples. This will have an influence on the difficulty or the ease with which the students come to grasp the concepts. Once a student has expressed the right hypothesis and has distinguished the "critical" attributes of the positive exemplars, s/he can then try to state a definition according to these essential attributes.

During the second part of the class, the students are asked to identify *unlabeled* examples and classify them in the positive or negative columns. The teacher then confirms the validity of the hypothesis and, if appropriate, names the concept. The students then generate their own examples and, in the last part of the class, analyze and describe their thinking: how did they arrive at their hypotheses? Did they have a broad hypothesis, or did they focus on a narrow view? "The three major functions of the teacher during reception oriented concept attainment activity are to record, prompt, and present additional data" (Joyce and Weil, 1980, p. 40).

The Selection Strategy

While in the reception strategy the exemplars are labeled in the first phase as positive and negative, in the selection strategy they are *unlabeled*, that is, the teacher does not tell the students beforehand which exemplars illustrate the rule and which do not. It is therefore their responsibility to discover which are positive and which are negative and to group them in order to develop hypotheses about their attributes. This of course presents a greater challenge and is useful for the more advanced students. The second and third parts of the lesson are the same as in the reception strategy.

The "Unorganized Materials" Strategy

This is the most successful strategy for advanced students dealing with literature, or social studies immersion classes. As Joyce and Weil (1980, p. 41) state: "The real benefit of concept attainment occurs when we begin to apply it to unarranged material to help us become aware of the attributes employed. Verbal assertions of concepts appear throughout written material, and the attributes on which their concepts are based are not always explicit." It is particularly useful when a teacher wants the students to locate and name a concept (and identify its attributes) used by a writer in a specific text and

then compare that example to passages using the same concept found in the work of other writers, but exhibiting different attributes. Using this model is more difficult, since the process demands from the teacher a deep knowledge of the subject matter, fine judgment to evaluate quickly what is happening during the progression of a particular lesson, sensitive reactions towards the students so that they are led to think further and not turned off if they feel their ideas are not listened to, and, finally, good managerial skills. The best results will be excellent class discussions in which, for a specific concept, the appropriateness of one attribute, rather than another, is discussed by the students.

In all three strategies, the students use analytical and evaluative thinking skills during the phases of a concept attainment lesson, focusing on what the teacher want them to learn, on the general content of the subject matter, and on what process they are using.

French Grammar Units Using the Reception Strategy

The specific example presented here is the unit on the *passé composé* (the present perfect) versus the *imparfait* (the imperfect). These concepts seem to present difficulties to students. Although the same distinction exists in English, the French language is extremely demanding in the proper usage.

The unit starts with sentences using the past, present, and future tenses with *hier* (yesterday), *aujourd'hui* (today) and *demain* (tomorrow). The first concept to be reviewed is that of the present tense. In the left column (the column of the positive exemplars), sentences using verbs in the present are given. On the right are the negative exemplars: sentences either in the future or the past, which do not illustrate the concept being reviewed. In all the following exemplars, only one sentence describing each attribute is given. Of course the teacher should prepare many of them to help the students deduce the attributes to be discovered. Through their discussions of the attributes of the sentences in both columns, the students propose hypotheses of what the concept might be that links all those labeled positive and opposes them to those labeled negative. Depending on the level of the class, the students might discover that the present in French has four different uses: first, a description; second, an action in the process of taking place (the progressive present in English); third, an habitual action; and fourth, an action taking place a discrete number of times. The unit therefore helps the students discover the diverse aspects of the present tense in French.

Positive exemplars	Negative exemplars
Description:	L'été prochain, je partirai en France.
Il a les cheveux bruns. (He has brown hair.)	(Next summer, I will go to France.)
Progressive:	Nous serons en vacances dans trois mois.
Il pleut très fort maintenant. (It is raining very hard now.)	(We will be on vacation in three months.)
Habitual action:	Quand j'étais en France, je n'aimais pas ce restaurant.
Il va à l'école le matin. (He goes to school mornings.)	(When I was in France, I didn't like this restaurant.)
Discrete actions:	Il a mangé du poisson hier.
Il va à l'école trois jours cette semaine. (He goes to school three days this week.)	(He ate fish yesterday.)

The second concept of the unit is that of the past tense. In the left hand column, examples of past actions are written on the board with no particular distinctions (using both the "passé composé" and the "imparfait"). In the right hand column are "non-exemplars", that is, sentences with actions taking place in the present. The students have to think of where they are in time and whether they are talking about something in the past or in the present.

Positive exemplars	Negative exemplars
Il a plu très fort hier. (Yesterday it rained very hard.)	Aujourd'hui, j'étudie. Today I study.)
L'année passée j'étais en cinquième. (Last year I was in seventh grade.)*	Ce soir (implying that it is evening at the moment when the statement is made) il n'y a que de la soupe. (Tonight there is only soup.)

Il parlait beaucoup en classe. Il fait froid cet hiver.
 (He spoke a lot in class.) (It's cold this winter.)

*In France, grade levels start at age six with the 12th and go up to the first.

Finally, the unit comes to the concept that has created great difficulties and has been the cause of numerous student mistakes, the differences between the use of the *passé composé* and the *imparfait*. In French, as we have seen, the present tense has four functions. In the past, three of these functions (description, progressive action and habitual action) are subsumed by the *imparfait*. The fourth, discrete action, is expressed by the *passé composé*, which implies a single event or a limited number of actions in the past with a stated or implied beginning or end. Therefore, the teacher develops positive exemplars (in the left-hand column) which include description, habitual actions, or actions in the process of taking place. In the right-hand column, the non-exemplars show a single event or an event repeated a limited number of times (in the past) using the *passé composé*.

Positive exemplars

Description:

A la fin de l'examen, j'étais très fatigué.
 (At the end of the exam, I was very tired.)

Progressive action:

Au moment de son arrivée, toute la famille regardait la télévision.
 (When he arrived, the whole family was watching television.)

Habitual action:

Dans le bon vieux temps les jeunes obéissaient à leurs parents.
 (In the good old days, young people obeyed their parents.)

Negative exemplars

J'ai été malade dimanche dernier.
 (I was sick last Sunday.)

J'ai vu un bon film hier soir.
 (I saw a good movie last night.)

Pierre est parti hier matin.
 (Pierre est parti hier matin.
 (Pierre left yesterday morning.)

After the students analyze both the positive and the negative exemplars, they are generally able to distinguish the two and define the attributes of both columns. They establish the features of the imparfait, which include description, and habitual or progressive action. In contrast, the passé composé is used when the action in the past is specific, delineated and delimited.

This unit might end with the creation, on the part of the students, of sentences using both the imparfait and the passé composé contrasted with sentences using two imparfait tenses.

Imparfait + Passé Composé

Pendant qu'il dormait le chien a aboyé.

(While he was sleeping, the dog barked.)

Pendant qu'elle lisait, assise à la table de la salle à manger, le téléphone a sonné.

(While she was reading, seated at the dining table, the telephone rang.)

Imparfait + Imparfait

Pendant qu'il dormait, le chien aboyait sans cesse.

(While he was sleeping, the dog was barking continually.)

Elle lisait, perdue dans ses pensées, alors que le téléphone sonnait dans le lointain sans attirer son attention.

(She was reading, lost in her thoughts, while in the distance the telephone was ringing without attracting her attention.)

This teaching model reverses the teaching process: usually it is the teacher who is the sole source of information and the students passively receive the "knowledge" they have to acquire. Teaching via the Concept Attainment Model is conducive to the Socratic method, allowing the students to discover the grammar rule by themselves, with the teacher only restating what they have already verbalized. Throughout these exercises, the teacher is asking the students to think conceptually about what they are studying. It is through their responses that s/he can determine when they have attained a concept and when they are only repeating words or rules without full conceptual understanding.

These grammar units can be adapted using the selection strategy. The students are presented with *unlabeled* exemplars, which pose a greater challenge and require a higher level of fluency in their language as they have to engage in discussion immediately.

Social Studies Example In An Immersion Class Using the Selection Strategy

The selection strategy is appropriate when students have encountered a concept but have not pulled together all its attributes and characteristics. For example, in a 7th grade world studies immersion class the concepts of rural and urban appear many times and their opposition and contrast is not always fully understood by junior high school students. Many of them live in suburbia and therefore the concept of city and the importance of its development in Western history is one the students must acquire. Examples of rural and urban are presented without labels, which lead the students to discuss the various attributes. This is the perfect definition of what immersion is all about as the students are dealing with the very content of their world studies curriculum while they are learning new vocabulary in the second language in a natural way.

At the beginning of the unit, the teacher puts on the board statements in French referring to all the characteristics which have been touched upon in connection with the concepts country and city in the previous weeks. These may include: limited and poor transportation, most of the people were farmers, markets were the center of social life, etc. Since the social studies curriculum does not have many examples relating to rural life, this part of the lesson can be used to review some of the vocabulary the students have worked with at the elementary level, the very vocabulary which is directly associated with country living. This is another example of how in immersion both language and learning of concepts are always intermingled. Here, in social studies, in order to capture all the characteristics of the concept "rural", the students review, or "relearn" some of the rich vocabulary of children's stories. Here are a few sentences picked at random.

Le jardinier prend soin des arbres fruitiers.

(The gardener takes care of the fruit trees.)

Julien fauche son foin.

(Julian mows his hay.)

L'eau du lac fait tourner le moulin.

(The water of the lake turns the mill.)

As the two concepts become more precise, the students are asked to work in groups and to come up with sentences in French describing them. They then write these examples on the board, unlabeled, and ask the rest of the class to list them as positive (urban) and negative (rural). During this phase of the

lesson, the students are asked to keep a record of all the "attributes," the selection of which engenders particularly interesting discussions. For example, why is it that large cities have museums? And it is exciting to note that students themselves discover that they exist because the financial and cultural resources available in a city are such that they produce museums and cultural centers.

Examples in Advanced Language or Social Studies Immersion Classes Using the "Unorganized Materials" Strategy

In the previously described strategies, the students were led to an understanding and naming of a concept through an examination of attributes. In the present strategy, the students start with concepts whose name is familiar, for example freedom or democracy, but whose attributes they have never explored in depth. Often they do not realize that many cultures use the same name for a given concept but associate with it not only different attributes, but at times almost opposite, contradictory ones. In the lessons described here, a comparison is made of excerpts from various literary works and social studies textbooks containing concepts denoted by the same name but defined by different attributes. The students come to a deeper understanding of the concepts as they work at defining the wide range of attributes.

The following example of the "unorganized materials" strategy arose in response to the required seventh grade World Studies curriculum, taught in French in the immersion classes. Although this curriculum is composed of unrelated units, the concept of freedom appears in conjunction with both the Middle Ages and the Soviet Union. This strategy of the Concept Attainment Model is well adapted to helping the students discover the attributes which describe the notion of freedom in each era and society, and to appreciate the complexity of this concept.

As a first step, before any class or group work is organized, the students prepare individually, as homework, a series of statements which describe and define their idea of freedom. These are picked up and put in a folder for future review. The next day, the teacher writes on the board a number of categories of people (these can be changed depending on the composition of the class, the social background of the students, and where the school is located). Some of these categories might be:

— Housewives in suburbia.

- Old people on retirement living in an inner city.
- Students in a junior high school.
- Farmers in Iowa.

The class is divided into small groups, each group representing one of the above categories. Students now have to think of *who* they are, as members of their particular group, of how they might spend their day, where they go when they are sick, whether they go on vacation, etc. The result of their research will be a well-written paper in *French* describing their lives and defining what freedoms their particular group has and what attributes they associate with freedom. Each paper will be presented to the class, the teacher acting only as moderator or guide. The students slowly become aware that freedom for one group is not defined by the same attributes as freedom for other groups and that the freedom of one group may impinge on the freedom of the others.

After this exercise, the teacher focuses on the discussion on the place in the curriculum where the concept of freedom arose, viz., in conjunction with the growth of cities in the Middle Ages. The class is again divided into small groups, which now represent categories pertinent to the Middle Ages: serfs, peasants, tradesmen, craftsmen, lords, knights, etc. They research and read all the materials in French in the classroom (and elsewhere) which describe how each of these groups lived. These materials are supplemented by portfolios of pictures (taken from paintings of that era), depicting the blacksmith, the knight, the life in the castle, etc. The students are thus immersed, through both the pictures and the texts, in the subject they are studying. It is out of this research that the attributes of the concept of freedom within the context of feudal society are understood by the students. And again each group writes a paper to be presented to the class describing how, from within their segment of medieval society, freedom would be defined. It is then, at the end of these lessons, that the teacher turns to an in-depth study of several passages. One of these is the section from the Grande Encyclopédie Larousse, volume 12, on *Libertés Publiques: L'évolution de la notion de liberté*, p. 7121.

In the previous example, the students come to understand that the attributes that are associated with the concept of freedom are different in different eras. In the next example, dealing with the concept of freedom as it arose in conjunction with the study of the USSR, the students come to understand that even at a given time in world history, the concept of freedom is associated with different attributes depending on the society. Excerpts are taken from encyclopedias from the United States, France, and the USSR (of

course, the material from the American and Soviet encyclopedias is translated into French). These examples help to reveal how, in the present, the attributes of the concept of freedom depend on the difference of culture and society. (A complete text of a social studies unit using the "unorganized materials" strategy is available from the author at 7402 Ridgewood Ave., Chevy Chase, MD 20815).

Conclusion

These new teaching strategies are exciting for the students, forcing them to think and participate more actively in class. The students are led to discover the grammar rules or the concepts to be learned through their own analysis of the examples, using their oral skills in the foreign language and with less emphasis on the written drills. Their comprehension of these rules and concepts, as manifested in their speaking and writing, is clearly superior to that acquired through repetitive drills or linguistic explanations. Classes, rather than being a drudgery, are transformed into a game of discovery; students learn new skills which make them feel good about their language and intellectual skills as well as about themselves in general. The classroom becomes a place where the students can be wrong and not be penalized, where they are encouraged to speak up, venture ideas and present hypotheses. As Kay and Young (1986, p. 158) state: "Through oral defense of their opinions and participation in sustained, free discussion, students are able to develop better self images, which affects their motivation to learn." The skills acquired by students using the strategies of the Concept Attainment Model are particularly well adapted to helping students learn content and reflect on their thinking processes.

Bibliography

- Adcock, Dwayne. "Foreign Languages in Elementary and Emerging Adolescent Education." In *An Integrative Approach to Foreign Language Teaching: Choosing Among the Options*. Ed. Gilbert A. Jarvis. Vol. 8 of ACTFL Foreign Language Education Series. Skokie, IL: National Textbook Co., 1976.
- Austin, G.A., J.S. Bruner and R.V. Seymour. "Fixed-Choice Strategies in Concept Attainment." *American Psychologist* 8 (1953):314 (Abstract).

- Bruner, Jerome, Jacqueline J. Goodnow, and George A. Austin. *A Study of Thinking*. New York: John Wiley, 1977.
- Bruner, Jerome. *Learning by Discovery*. Ed. L. Shulman and E. Keisler, Chicago: Rand McNally, 1966.
- Bruner, Jerome. *Toward a Theory of Instruction*. Cambridge: Harvard University Press, 1966.
- Galloway, Vicki B. "Public Relations: Making an Impact." In *Action for the '80s: A Political, Professional, and Public Program for Foreign Language Education*. The ACTFL Foreign Language Education Series, Ed. June K. Phillips. New York: American Council on The Teaching of Foreign Languages, 1981.
- Giaque, Gerald S. "Socrates in the First Year Foreign Language Classroom — or — When are 'Why' Questions Appropriate?" [ERIC ED 254 078].
- Guthrie, W.K.C. *The Greek Philosophers: From Thales to Aristotle*. Harper Torchbooks. New York: Harper and Row, 1960.
- Heidbreder, E. "Attainment of Concepts: VI Explanatory Experiments on Conceptualization at Perceptual Levels. *Journal of Psychology* 26 (1948): 193-216.
- Hovland, C.I. "A 'Communication Analysis' of Concept Learning." *Psychology Review* 59 (1952): 461-72.
- Hovland, C.I. and W. Weiss. "Transmission of Information Concerning Concepts through Positive and Negative Instances." *Journal of Experimental Psychology* 45 (1953): 175-82.
- Hackforth, R. "Great Thinkers, (I) Socrates." *Philosophy* (The Journal of the British Institute of Philosophy) 8, No. 31 (July 1933): 259-72.
- Hamilton, Dorothy and Virginia Tucker. *Two Cognitive Models Which Promote Critical and Creative Thinking in Gifted Students*. Maryland State Department of Education, 1984.
- Joyce, Bruce and Marsha Weil. *Models of Teaching*. 2nd rev. ed. Englewood Cliffs, N.J.: Prentice-Hall, 1980.
- Kay, Linda H. and Jerry L. Young. "Socratic Teaching in Social Studies." *The Social Studies* 77, No. 4 (July/August 1986): 158-61.
- Strasheim, Lorraine A. "Broadening the Middle School Curriculum Through Content: Globalizing Foreign Language." In *Action for the '80s: A Political, Professional, and Public Program for Foreign Language Education*. The ACTFL Foreign Language Education Series, ed. June K. Phillips. New York: American Council on the Teaching of Foreign Languages, 1981.